

EXHIBIT B

Notice for Justin Woodford

The Government anticipates calling Justin Woodford as an expert in cryptocurrency and blockchain analysis. Justin Woodford is a Special Agent with the Federal Bureau of Investigation (FBI) in the Albany Division. SA Woodford has worked as a Special Agent since 2020. He is assigned to the Albany Division's Cyber Task Force and he is also a member of the Virtual Currency Response Team (VCRT). Prior to serving as a Special Agent, Mr. Woodford worked as an investigative specialist for the FBI's Washington Field Office and the Buffalo Field Office from 2009 to 2020. He began his career as an FBI Police Officer. SA Woodford earned a Bachelor of Science degree in Computer and Information Science from the University of Maryland, University College in 2013. SA Woodford holds numerous certifications including a certification in Chainalysis Reactor Certification. SA Woodford has not testified in the past four years, and he has no publications. His CV is attached.

SA Woodford has created certain charts that are included in this disclosure. We reserve the right to supplement and/or modify those charts should new information become available. In addition, SA Woodford may create additional exhibits, charts, summaries, or other demonstrative materials that may be used at points during this proceeding. We will provide those as soon as they are created.

The Government will present evidence that Aron Ethridge received payment in bitcoin, which is a type of cryptocurrency, for his part in the murder-for-hire scheme. Ethridge then withdrew cash from a Coinflip ATM. SA Woodford was asked to review Coinflip data associated with Aron Ethridge. His testimony will be based on his review of that Coinflip data and his training, certifications, and experience.

Cryptocurrency (also known as digital currency) is generally defined as an electronically sourced unit of value that can be purchased with, sold for, or used as a substitute for fiat currency (*i.e.*, currency created and regulated by a government). Cryptocurrency is not issued by any government, bank, or company; it is instead generated and controlled through computer software operating on a decentralized peer-to-peer network. Cryptocurrency is not illegal in the United States. Cryptocurrencies are widely used to conduct both legitimate and unlawful business. For example, with regard to unlawful business, bitcoins were a payment method used on websites on the dark web that offered drugs and other contraband for sale.

Bitcoin (“BTC”) is a type of cryptocurrency. Payments made with cryptocurrencies are recorded in a public ledger that is maintained by peer-to-peer verification (*i.e.*, a “blockchain”) and is thus not maintained by a single administrator or entity. The Blockchain keeps a publicly-available record of the date, the amount, and the origin and destination of any transaction involving Bitcoin. The Blockchain is not maintained by any one person. It is an auto-generating record of transactions. It is stored on computers all over the world. The origin and destination of a Bitcoin transaction are designated by addresses. Every place where Bitcoin is stored has an alphanumeric code assigned to it called an address. To look up a specific transaction, one must look up a unique identifier assigned to that transaction.

Bitcoin is designed to ensure that the blockchain is resistant to any attempted manipulation. Bitcoin transactions are signed by the sender's private key, validated by nodes, confirmed by miners, and then added to the blockchain, whereupon subsequent node operators and miners affirm the integrity of the transaction by accepting the block in which the transaction is contained and adding new blocks on top of it. In short, the blockchain has extensive built-in protections to ensure the system or process produces an accurate result.

An investigative tool used by FBI to analyze blockchain transactions is Chainalysis. Chainalysis is primarily a software company that allows transparency into cryptocurrency. It provides an investigative and compliance software to be able to analyze the transactions that are actually occurring with cryptocurrency. Chainalysis provided certifications for their platform. Chainalysis offers a platform called Reactor, that takes blockchain information and provides it in a user interface to establish the flow of funds from one entity to another.

Individuals can acquire bitcoins, bitcoin cash, and other cryptocurrencies, for example, through exchanges (*i.e.*, websites—some of which are described further below—that allow individuals to purchase or sell cryptocurrencies in exchange for fiat currency or other cryptocurrencies), ATMs, or directly from other people. Individuals can also acquire cryptocurrencies by “mining.” An individual can mine bitcoins, bitcoin cash, and other cryptocurrencies by allowing their computing power to verify and record payments into the public ledger. Individuals are rewarded for this task by receiving newly created units of a cryptocurrency.

Individuals can send and receive cryptocurrencies through peer-to-peer digital transactions or by using a third-party broker. Such transactions can be done on many types of computers, including laptop computers and smart phones. Even though the public addresses of those engaging in cryptocurrency transactions are recorded on a public ledger, the true identities of the individuals or entities behind the public addresses are not recorded on the public ledger. If, however, an individual or entity is linked to a public address, it may be possible to determine what transactions were conducted by that individual or entity. Bitcoin based transactions are therefore sometimes described as “pseudonymous,” meaning that they are partially anonymous.

Bitcoins, and bitcoin cash can be stored in digital “wallets.” A wallet essentially stores the access code that allows an individual to conduct cryptocurrency transactions on the public ledger. To conduct transactions on the public ledger, an individual must use a public address (or “public key”) and a private address (or “private key”). Generally, the public address can be analogized to a traditional bank account number, while the private key is like the password or PIN used to access that bank account.

Regarding Bitcoin wallets, SA Woodford will testify that Bitcoin wallets generally use something called unspent transaction outputs (UTXOs) also known as “change addresses” when transacting. For example, if a wallet address has 3 BTC and the user sends 1 BTC to someone else's wallet, that 1 BTC goes to the intended recipient's wallet address and the remaining 2 BTC goes to a newly generated wallet address that belongs to the user's digital wallet. This newly generated wallet address is called a “change address” and is considered “unspent” and can be used in a future transaction.

There are typically five methods used to determine if an output to a transaction is either the payment or the unspent transaction output. The names of these five methods are co-spend, named output, address type, round amounts, and simplest spend.

First, regarding co-spending, if there are multiple inputs in a transaction they are considered to be co-spending. In this case, it was a relatively straightforward determination by SA Woodford that each of those addresses were initiated from the same wallet.

Second, the named output method is a change address determination based on funds being sent from a private address to a service address. If there are two outputs in a transaction and one is to a service address and the other is to private address the private address is most likely to be the change address.

Third, the address type method is a change address determination based on the four Bitcoin address types. This is due to the fact that there are four Bitcoin address types, Legacy (Pay-to-Public-Key-Hash – P2PKH), SegWit (Pay-to-Script-Hash - P2SH), Bech32 (Native Segregated Witness - Native SegWit, and Taproot (bech32m or pay-to-taproot -P2TR). For example, if there is an input address sending cryptocurrency and there are two outputs, one of the same address type and one of a different address type, the change address is most likely to be the address with the same address type.

Fourth, the round amounts change address determination is based on the human desire to use round numbers. For example, if the input address of a transaction is 1.45 BTC and the output addresses of the transaction are 1 BTC and .45 BTC, the output address receiving .45 BTC is most likely to be change address. Similarly, the actual fiat currency amount equivalent to the virtual currency value can be swapped as the round number.

Fifth, the simplest spend method is based on the fact that a wallet only spends funds that it needs to spend to fulfil the transaction amount. If there are multiple input addresses used to facilitate a transaction, the change address is most likely the output address containing the smaller amount. For example, if there are three input addresses containing 3 BTC, 5 BTC, and 2 BTC and two output addresses receiving 1 BTC and 9 BTC, the 1 BTC output address is most likely to be the change address. This is because the address with 2 BTC would have satisfied the transaction amount if the payment was only 1 BTC. When analyzing transactions to determine the unspent transaction output, or change address, a combination of methods can be applied simultaneously. Additionally, being able to utilize more than one method increases the likelihood of identifying which output is the unspent transaction output address.

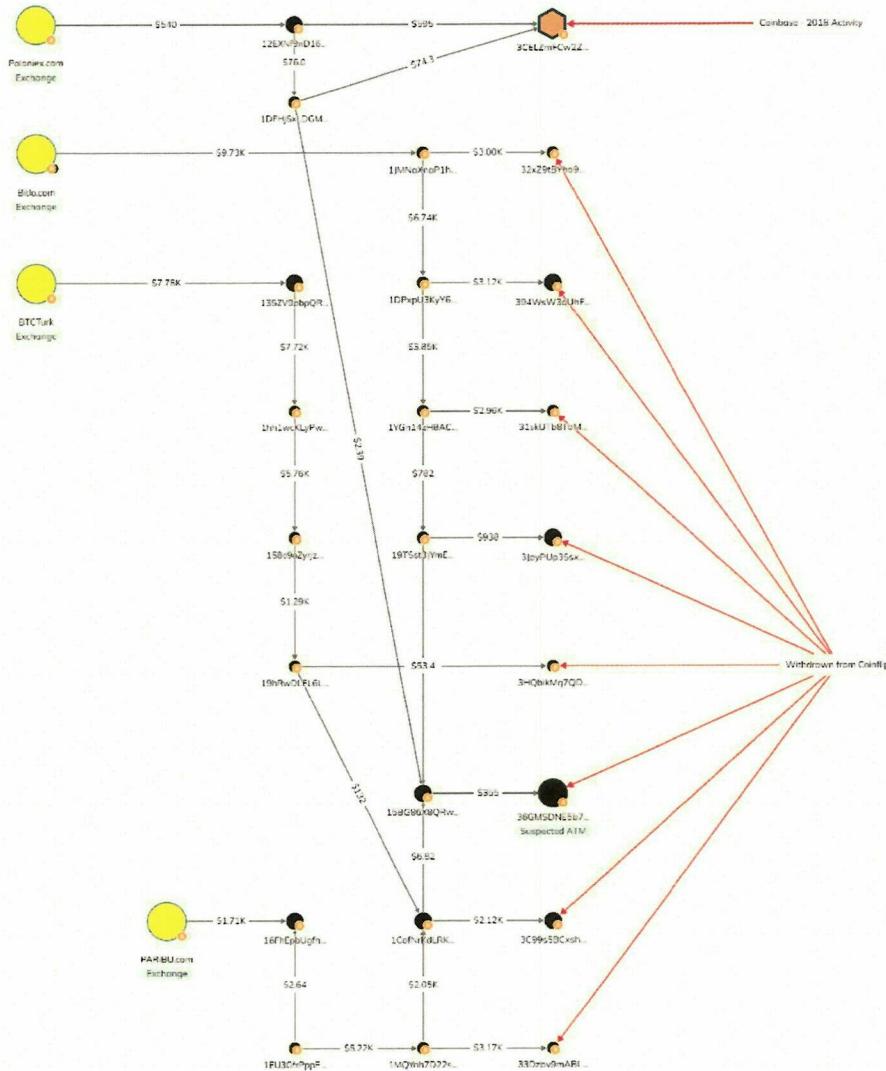
Exchangers and users of bitcoins and bitcoin cash often store, and transact with these cryptocurrencies in several ways, utilizing desktop, mobile, and online wallets; hardware devices; and paper wallets. Desktop, mobile, and online wallets are electronic in nature and can be stored on mobile devices (for example, smart phones or tablets) or websites that users can access via a computer, smart phone, or any device that can search the internet. Wallets can also be stored on external or removable media and hardware (such as USB thumb drives). In addition, paper wallets contain an address and a QR code, a matrix barcode that is a machine-readable optical label, with the public and private key embedded in the code. Paper wallet keys are not stored digitally. Wallets

can also be backed up into, for example, paper printouts, USB drives, or CDs, and accessed through a “seed phrase” (random words strung together in a phrase, also known as a “recovery phrase”) or a complex password. Additional security safeguards for cryptocurrency wallets can include two-factor authorization (such as a password and a phrase). Individuals possessing cryptocurrencies often have safeguards in place to ensure that their cryptocurrencies become further secured in the event that the cryptocurrencies become potentially vulnerable to seizure and/or unauthorized transfer.

Coinflip (coinflip.tech) is a cryptocurrency ATM company. They offer ATMs in many locations across the United States, including locations in Las Vegas, Nevada. Coinflip offers the ability to buy and sell cryptocurrency at their ATM locations. Both buying and selling cryptocurrency requires the user to provide their own cryptocurrency wallet. When buying cryptocurrency, the user first selects the type of cryptocurrency they want to purchase. Next, they are required to accept Coinflip’s terms of service. The user is then required to provide a phone number where a one-time passcode can be sent. Once authenticated, the user then scans their personal wallet QR code at the ATM sensor. After that, the user must make a payment for the cryptocurrency purchase at the ATM. Once that is complete, Coinflip sends the equivalent amount of cryptocurrency to the wallet address provided by the user.

When selling cryptocurrency Coinflip requires a similar process. However, Coinflip only facilitates the sale of Bitcoin or Litecoin. Once the user selects the type of cryptocurrency they want to sell, they must first accept the terms of service. Then the user enters a phone number for a one-time passcode to be sent. Once the user is authenticated they must specify the cash withdrawal amount and select the sell button. Then the user must use their personal wallet to scan the Coinflip ATM QR code for the address in which the crypto will be sent. After the cryptocurrency has been sent from the user’s personal wallet, the user must then wait to receive a text message from Coinflip confirming their cash is ready for withdrawal. Then the user must choose “redeem” on the ATM and again verify their phone number. Once that is authenticated, cash is then dispensed from the ATM. I also know that Coinflip collects biometric data as part of their Know Your Customer or “KYC” process. Each Coinflip ATM generates biometric data by analyzing images of the user’s face during their verification process. Coinflip also collects data such as, first and last name, phone number, email address, username, and mailing address.

SA Woodford reviewed wallet information for Ethridge’s cryptocurrency account and the related blockchain entries. In connection with that review, SA Woodford created the below chart:



Specifically, SA Woodford's review revealed that on March 4, 2020, someone with a Bitlo account sent approximately 1.11 Bitcoins (BTC) or \$9,370 to wallet address 1JMNAXnaP1hFD9WzzNNVJGTRfyWLTJ1asE.

On March 5, 2020, address 1JMNaXnaP1hFD9WzzNNVJGTRfyWLTJ1asE sent 1.10988996 BTC (\$9,737.93 USD) in transaction hash 83f2681d256694065e03691a36c51d728a49fabee73ef92246685ea6ae705ee6. The amounts output in the transaction were 0.342201 BTC (\$3,002.39 USD) to 32xZ9tBYha9JA7a6VUb8WqcRjTmHMzw18P and 0.76768218 BTC (\$6,735.47 USD) to 1DPxpU3KyY6VudivZJvu7m1YuQyEjSwAMa. Based on the UTXO method of matching the address type, Legacy type in this case, and the fact that CoinFlip records revealed Ethridge placed a sell order at CoinFlip ATM number BT300605, located at 450 Fremont Street #130 Las Vegas, NV 89101, (hereinafter “BT300605”), address 1DPxpU3KyY6VudivZJvu7m1YuQyEjSwAMa is

likely a change address and in the same wallet as 1JMNaXnaP1hFD9WzzNNVJGTRfyWLTJ1asE.

On March 6, 2020, address 1DPxpU3KyY6VudivZJvu7m1YuQyEjSwAMa sent 0.76768218 BTC (\$6,966.57 USD) in transaction hash 2976c83f1c5005afab340b592b0a0682775e1263e601eb2218d4e83f3cba8bec. The amounts output in the transaction were 0.343674 BTC (\$3,118.77969 USD) to 394WsW3qUhFnufnAfpAtgV58Gt83K3t7rdyF and 0.42397202 BTC (\$3,847.46977 USD) to 1YGn14zH8AC4imFSMZBEYsn62RxCuBPi3. Based on the UTXO method of matching the address type, Legacy type in this case, and the fact that CoinFlip records revealed Ethridge placed a sell order at CoinFlip ATM number BT300605, address 1YGn14zH8AC4imFSMZBEYsn62RxCuBPi3 is likely a change address and in the same wallet as 1DPxpU3KyY6VudivZJvu7m1YuQyEjSwAMa.

On May 13, 2020, address 1YGn14zH8AC4imFSMZBEYsn62RxCuBPi3 sent 0.42397202 BTC (\$3,739.9335 USD) in transaction hash c4f353fd01087996dc60aaa281c33740139f75a2f8a195f3e09a0d6f2278d1c0. The amounts output in the transaction were 0.08861018 BTC (\$781.64 USD) to 19TSst3JYmEPDEgPKawZ6XECoJ15wsJ72u and 0.335285 BTC (\$2,957.60 USD) to 31skUTb8TbMqY1dFMYMH5ab9SbckJT7sP8. Based on the UTXO method of matching the address type, Legacy type in this case, and the fact that CoinFlip records revealed Ethridge placed a sell order at CoinFlip ATM number BT300860, located at 4305 Dean Martin Drive #120, Las Vegas, NV 89103, (hereinafter “BT300860”), address 19TSst3JYmEPDEgPKawZ6XECoJ15wsJ72u is likely a change address and in the same wallet as 1YGn14zH8AC4imFSMZBEYsn62RxCuBPi3.

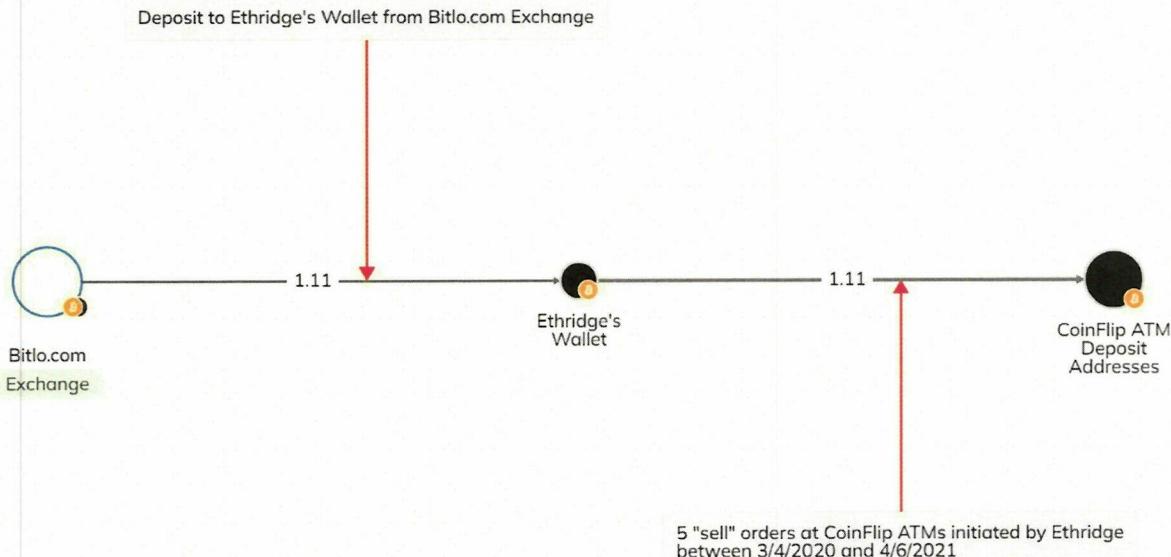
On July 29, 2020, address 19TSst3JYmEPDEgPKawZ6XECoJ15wsJ72u sent 0.08861018 BTC (\$994.62 USD) in transaction hash 988070be1c4a633e6d5bd41f9494aa7a8d0a8317ae3b4fe7367d064b784fa0cc. The amounts output in the transaction were 0.00475748 BTC (\$53.40 USD) to 125tJwnJN4DRzvUWDNkCQoWM6vsmNErY1D and 0.083525 BTC (\$937.54 USD) to 3JpyPUp3SsxS8p1AVwxhow87Fh83PvAA8s. Based on the UTXO method of matching the address type, Legacy type in this case, and the fact that CoinFlip records revealed Ethridge placed a sell order at CoinFlip ATM number BT300860, address 125tJwnJN4DRzvUWDNkCQoWM6vsmNErY1D is likely a change address and in the same wallet as 19TSst3JYmEPDEgPKawZ6XECoJ15wsJ72u.

On April 6, 2021, addresses 15BG86X8QRwbqjJTfqry1vVap1AZMBemtrv, 125tJwnJN4DRzvUWDNkCQoWM6vsmNErY1D, and 1DLF6BW7KrogZPYyETR92332d9Hy38vrN8 co-spent 0.00062461 BTC (\$36.92 USD), 0.00475748 BTC (\$281.26 USD), and 0.00093264 BTC (\$55.13 USD) respectively in transaction hash 66cce31a7a1ea2287b6050ab776d1604fb66586df6706d35a56de5afc7dd1cda. The amount output in the transaction was 0.00600675 BTC (\$355.11 USD) to 3DYnyYyCh3JcppmcZw1rmVeW1LksZNgAzD. Based on the UTXO method of matching the address type, Legacy type in this case, and the fact that CoinFlip records revealed Ethridge placed a sell order at CoinFlip ATM number BT300860. Since

15BG86X8QRwbqjJTfqry1vVap1AZMBemtrv,
 125tJwnJN4DRzvUWDNkCQoWM6vsmNERY1D,
 and
 1DLF6BW7KrogZPYyETR92332d9Hy38vrN8 co-spent together, they are likely in the same
 wallet.

Based on information on their publicly available website (<https://www.bitlo.com/>), Bitlo is a cryptocurrency exchange. A user at Bitlo can purchase hundreds of virtual assets in Turkish Lira or Tether (USDT) markets at the exchange. They allow the user to deposit and withdraw Turkish Lira to and from their Bitlo account. A user can also sell their cryptocurrency at the Bitlo exchange for Turkish Lira and have the money deposited to their bank account. Bitlo offers advanced trading where the user can set a price in which they want to buy or sell virtual assets. Additionally, Bitlo offers Over the Counter (OTC) services where the user can place larger trades directly without using the order book. Bitlo collects Know Your Customer or “KYC” data prior to utilizing their services in accordance with Mali Suçlar Araştırma Kurulu (MASAK), the Turkish Financial Crimes Investigation Board. Typically this means collecting first and last name, phone number, email address, home address, and government identification of that customer. In addition to Bitlo’s web application, Bitlo offers both iOS and Android mobile applications to access the exchange.

Below is the specific part of the chart that shows the transfers, including the specific “change addresses,” that SA Woodford identified based on his review of the change address analysis described above. This represents SA Woodford’s opinion that addresses that sent bitcoin to Coinflip are part of a wallet owner or administrated by Aron Ethridge. The three below clusters represent the entities involved in the analysis.



In total, from reviewing the coinflip records, Special Agent Woodford identified five (5) transactions from Aron Ethridge's wallet to addresses controlled by Coinflip in order to withdraw cash equivalents of the value of the bitcoin. Special Agent Woodford's analysis of those transactions continues to date.

The United States asserts that this notice satisfies the requirements of Rule 16(a)(1)(G) and requests reciprocal discovery regarding expert witnesses under Rule 16(b)(1)(C). If, after viewing this notice, the defendant requests further information or has concerns under Rule 16, the United States requests that the defendant advise as to what further information is necessary to prepare for trial.

In compliance with Federal Rule of Criminal Procedure 16(a)(1)(G)(v), I, Justin Woodford, hereby declare that I have reviewed this notice and agree to its contents.


Date: 5/1/2024

Justin Woodford

Special Agent
Federal Bureau of Investigation
Albany Division

Education

Bachelor of Science
Computer and Information Science
University of Maryland University College

Work Experience

- 2006-2009
Police Officer – Federal Bureau of Investigation
FBI Academy, Quantico, Virginia
- 2009-2020
Investigative Specialist – Federal Bureau of Investigation
Washington Field Office and Buffalo Field Office
- 2020-Present
Special Agent – Federal Bureau of Investigation
Albany Field Office
Albany Cyber Task Force
Virtual Currency Response Team (VCRT)

Certifications

- Chainalysis Reactor Certification
- Global Information Assurance Certification (GIAC) Security Essentials (GSEC)
- GIAC Open Source Intelligence Certification (GOSI)
- FBI SWAT Tactical Certification
- FBI SWAT Breacher Certification
- FAA Part 107 Remote Pilot Certification